



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,574	02/28/2002	Edward Harrison Teague	020111	9018
23696	7590	08/05/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			KIM, KEVIN	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,574

Applicant(s)

TEAGUE ET AL.

Examiner

Kevin Y. Kim

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12,13,15,17-26,28,29,31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-26,28,29,31 and 32 is/are allowed.
- 6) ☒ Claim(s) 12,13,15,17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed May 19, 2005, with respect to the rejection(s) of claim(s) 12, 13, 15, 17 and 18 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art as set forth below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Rosa et al (US 6,078,611 previously cited but not used)

La Rosa et al discloses a method of time-tracking a plurality of fingers (122, 124, 126, 128) in a Rake receiver, see Fig. 1, comprising;

restricting each finger from tracking outside motion limits for that finger, see Fig. 7

illustrating assigned ranges for finger timings,

determining the motion limits for a finger in accordance with the position of one or more adjacent fingers, see col. 4, lines 52 ~ 55, describing a minimum separation between the finger timings,

La Rosa et al fails to teach that "no advance limit is set for a finger with no adjacent finger ahead in time within a pre-determined offset limit" or that "no retard limit is set for a finger with no adjacent finger behind in time within a pre-determined offset limit." In

Art Unit: 2638

other words, the first finger in time of the Rake receiver is allowed to advance without a limit. However, the timing tracking method of La Rosa et al is to prevent fingers from merging while tracking a received signal. See col.2 lines 22-23. It follows that a finger that would not merge with another finger when moved in time needs no limit in that direction. Such fingers are the first finger and the last finger, which do not have an adjacent finger ahead in time and an adjacent finger behind in time respectively. Thus, it would have been obvious to one skilled in the art at the time the invention was made to remove an advance limit for the first finger and a retard limit for the last finger of the Rake receiver of La Rosa et al because there is no need for such a limit.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15,17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by La Rosa et al. (US 6,078,611 previously cited but not used)

Claim 15.

La Rosa et al discloses a method of time-tracking a plurality of fingers (122,124,126,128) in a Rake receiver, see Fig.1, comprising;

Art Unit: 2638

restricting each finger from tracking outside motion limits for that finger, see Fig.7
illustrating assigned ranges for finger timings,
regenerating the motion limits periodically, see col. 4, lines 52 ~ 55, describing a
minimum separation between the finger timings.

Claims 17 and 18.

La Rosa et al discloses a method of time-tracking a plurality of fingers in a Rake receiver,
(see col.2, lines 23-28) comprising;

restricting each finger from tracking outside motion limits for that finger, see Fig.7
illustrating assigned ranges for finger timings,
regenerating the motion limits subsequent to the issuance of a time-tracking command,
see col. 4, lines 52 ~ 55, describing a minimum separation between the finger timings, which
requires an “issuance of a time-tracking command.”

Allowable Subject Matter

6. Claims 19-26,28,29,31 and 32 are allowed.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The
examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Kenneth Venderpuye can be reached on 571-272-3078. The fax phone number for
the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2638

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kevin Kim', is written in a cursive style.

KEVIN KIM
PATENT EXAMINER